

Title (en)  
INTRUSION SENSING SYSTEMS

Title (de)  
EINDRING-DETEKTIONSSYSTEM

Title (fr)  
SYSTEMES DE DETECTION D'INTRUSION

Publication  
**EP 0834166 B1 20020227 (EN)**

Application  
**EP 96920965 A 19960624**

Priority  
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Abstract (en)  
[origin: US6127926A] PCT No. PCT/GB96/01517 Sec. 371 Date Apr. 10, 1998 Sec. 102(e) Date Apr. 10, 1998 PCT Filed Jun. 24, 1996 PCT Pub. No. WO97/01160 PCT Pub. Date Jan. 9, 1997 Vertical surface protection in a security installation is achieved by detecting disturbances in a microwave beam sent from a transmitter to a receiver, both installed substantially above the ground and adjacent to the vertical surface. The transmitter and receiver have associated beam aeriels of extended horizontal aperture of not less than 0.50 meters (20 inches) to mitigate the effects of surface reflection from metal scaffold, plastic sheeting or netting, wooden boarding and brick or stone facing. The aeriels are preferably slotted waveguide arrays and the advantages of using circular polarization are shown. Circularly-polarized slotted waveguide arrays are disclosed having a center feed to minimize frequency-dependent beam-spreading. The sensor may be used with an intruder detector to protect buildings in scaffold by utilizing triple technology exterior detection incorporating: microwave Doppler shift; at least one and preferably two passive infra-red devices linked together through timers and lens with horizontal curtain pattern; and anti-sabotage reflected active infra-red. The system can combine the aforementioned technologies into a new device and this format overcomes the individual limitations of each of the prior art technologies when used in unison in an external scaffold environment.

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IPC 8 full level  
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